

# ARMY OF HUNGRY FLEAS INVADES NEW YORK

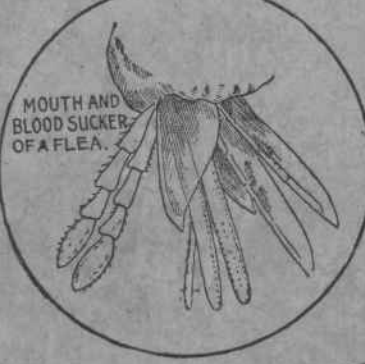
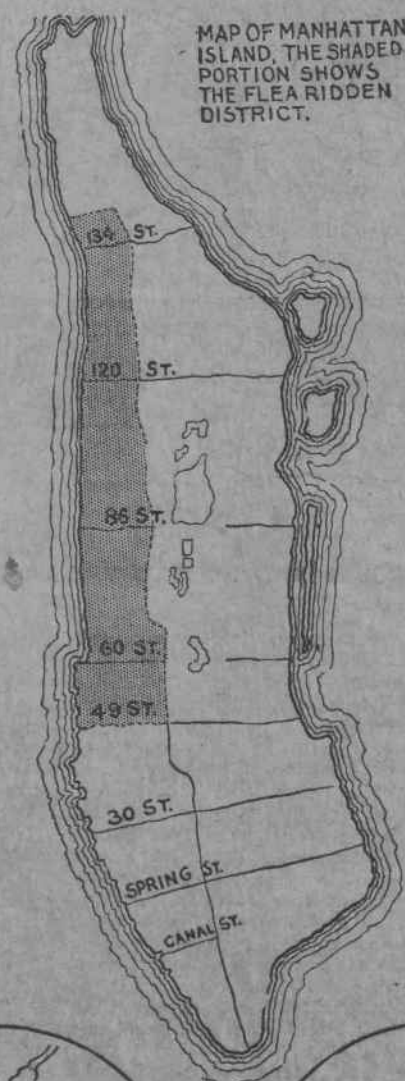
Bearing  
Torture  
and  
Unrest.



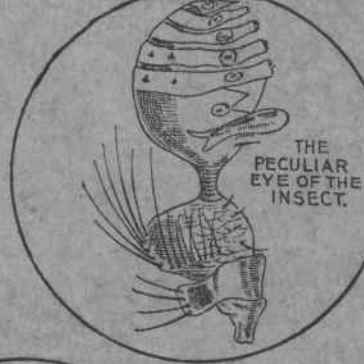
THIS IS MRS. AGILE FLEA WHO'S SPENDING THE SUMMER IN NEW YORK.



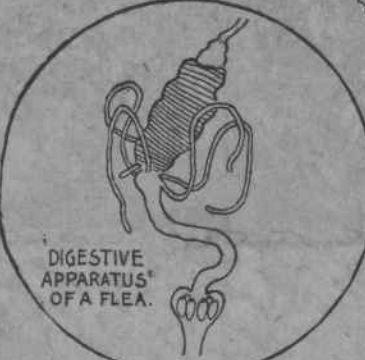
THIS IS MR. AGILE FLEA WHO ACCOMPANIES HIS WIFE ON HER SUMMER RAMBLES



MOUTH AND BLOOD SUCKER OF A FLEA.



THE PECULIAR EYE OF THE INSECT.



DIGESTIVE APPARATUS OF A FLEA.



THE MUSCULAR HIND LEG OF A FLEA.

**M**R. AND MRS. AGILE FLEA are visiting New York. They are stopping on the West Side, and are being banqueted lavishly by people of good taste.

In other words, there is a plague of little black fleas in Gotham that is making every one between Forty-ninth street and the Harlem River regard their dogs and cats with undeserved suspicion. It is a popular superstition that cats and dogs harbor fleas, and whenever there is a visitation of the pests the luckless animals are accused of responsibility therefor.

During Winter, Spring and as much of the Summer as has passed the dog and cat catchers have worked overtime. There is a decided diminution of domestic animals, but there is none whatever in the domestic flea. On the contrary, it is matter of comment that the fleas were never so many, so black or so voracious before.

There is a veritable "flea belt" in New York now, extending along the west side of Central Park, from Forty-ninth street to One Hundred and Thirty-fifth streets. And the population shows an unwelcome tendency to migrate.

It isn't supposed to be good form to possess fleas or polio to talk about them. That is mostly because there is a mistaken idea extant that fleas and dirt are synonymous. On the authority of one of the greatest naturalists living—and for that matter, on the authority of the personal knowledge of hundreds of careful housewives—this annoying little insect settles down in a sweep and garnished house just as cheerfully as in one that is seldom cleaned. Edward A. Butler, the great English naturalist, says the most scrupulous cleanliness cannot secure immunity from a visitation of fleas.

Harlem used to be the great Summer resort of the flea tribe. But the family has extended its visitation list until now the "flea belt" ranges three parts of the way down Manhattan Island. There seem to be as many fleas as usual in the old resort.

In the hollow below Columbia College, so that the present visitation seems to be composed of newcomers.

Where the insects come from nobody knows. Let it be written down once and for all that the marauding cat and the affectionate dog are not responsible for introducing fleas to a house. The cat has fleas—plenty of them—and so has the dog, but each animal's flea is utterly distinct from "Pulex irritans"—the little black pest which bothers mankind. The difference between the insects, too, goes further than mere appearance. A dog's flea will neither bite nor stay upon a cat; the insect peculiar to the cat tribe abominates the taste of dog. Both insects unite in their detestation of man. In brief, the insects unwillingly carried by cats and dogs will not bite men, women or children.

Don't snarl scornfully at this bit of information. The thing is a matter of scientific record.

The fact of the matter is that very few people know anything about the interesting insect—for interesting he decidedly is, in spite of his predilections. In the first place they are ecological oddities, for naturalists have never been quite able to determine whether fleas are a kind of wingless fly which has learned bad habits, or whether they belong to a tribe of beetles. That may not seem to a very useful fact to record, but it will be seen that a little knowledge of this kind is exactly what is required by those who would like to rid their houses of the pest.

A great many insects are, so to speak, born "ready made." Fleas are not. The little fleas are not young ones; they are the males, and are as big as they will ever be. Fleas are peculiar among all the parasites in that they undergo a complete metamorphosis. They are parasite only during one stage of their career. In his young the flea is a vegetarian. It is only the full-grown insect by which we are troubled. The flea starts, like all insects,

from the egg.

The eggs of a flea are white, oval, sticky things. So far as the human species is concerned, these eggs appear to be laid among rugs, mats and carpets, and not upon the clothes of their unwilling hosts. From this it is evident that while sweeping will have no particular effect upon the adult flea, it will considerably interfere with the insect's nursery arrangements.

From these eggs are hatched not brown, leaping fleas, but white, footless, wormlike maggots, whose bodies are set with long hairs. Each of these little grubs consists

of a head and twelve joints, the last joint ending in a pair of hooks. The head carries four breathing tubes, a pair of short feelers, and a good pair of biting jaws. For at this period of its life the young flea devours solid food. It is not a blood-sucker until later.

These little grubs are extremely lively creatures, wriggling about vigorously, and working themselves along by aid of their hairy bodies and the hooks on their tails. They appear to feed upon dry animal substances of various kinds, some fragments of which they are pretty sure to find in the

neighborhood of their birthplace. Lecuwenhoek, the naturalist, found that they liked to eat the bodies of dead flies. Another scientist found that they thrived upon the minute fragments of human skin which insensibly drop from the body to the ground.

Bearing these facts in mind it once more becomes evident that unswept rugs, mats and carpets are apt to constitute an environment eminently adapted to the propagation of fleas. The grubs are quite soft, and a stiff broom would kill many. The frequent use of the broom, therefore, is

entirely desirable; and not the dust box, but the fire, should be the destination of all rubbish swept up.

The young flea does not remain a grub very long. In Summer it becomes full grown in about twelve days, and it then grows a little opaque or cradle in which to become a chrysalis. This cradle is, of course, extremely minute, and to the outside of it are usually attached so many bits of dust and rubbish that its identity is hidden.

Inside this cradle the maggot slips out of its skin and becomes a little hump-backed chrysalis, in shape foreshadowing the flea it will presently be.

For two weeks the embryo flea remains in this shell. First it is a dirty white color, but it gradually darkens until, at the expiration of the fortnight, it emerges as a perfect flea.

It is at this time that the flea really enters upon its predatory career. Up to this time it has only had a pair of jaws with which to chop up such things as it cared to eat. Now it finds itself equipped with a collection of saws and knives intended for use only upon soft material. It is with these saws and knives that the flea inflicts its bite upon man.

First, upon its head are two little horns or feelers, with which it taps the surface of the skin to find a likely spot for operations. Having settled upon a place, the flea then advances a pair of saws or mandibles, and proceeds to cut its way through the skin. These mandibles consist of two straight, flat blades, pointing downward and notched on each side like a double saw. These teeth number about seventy-five in each row on either side, which, at the rate of two double rows to each mandible, gives a total of some 150 teeth to its little rip-saw.

Between these two saws the flea keeps its trunk or sucker, which it lowers into the hole it has carved in its victim's skin. The trunk is hollow and through it the

flea sucks as much blood as it needs. The whole apparatus consists of a piercing mechanism of exquisite when seen under a microscope. accustomed to speak of "flea bite" this is scarcely a correct way of describing the operation. The appendages mouth are not in any sense biting the action is that of vertical pressure something like the action of a rock

The accompanying pictures are from photographs of the human greatly magnified.

Much that has been written at strength and intelligence of fleas, nonsense. It is said that a flea is thirty times its own height, which from this it has been argued that man jumped "in proportion" he would be able to leap 150 feet. That is a sense. Such matters as weight, available energy and volume of enter into the question, and, when considered, it is much more wonderful that a man should be able to jump than it is that a flea should be a spring thirty times its own height.

The so-called "trained fleas" are a die. All the supposedly intelligent

ments made by the insects really of struggles to escape. Take, for example, the waiting, in which the fleas go sing around in pairs to the sound musical box. Two fleas of equal strength are attached to an extreme leave piece of wire, one at each end, are fastened in such a way as to opposite directions and at right angles to the wire. Their struggles, consequently produce opposite pulls at the end of bar of wire, and, therefore, need produce, without any intention on part, a rotary motion, or "waltz."

To aid in the illusion a small apparatus consisting of fleas fastened in models of musical instruments. Insects are set upright their legs ca flourish about in the air, suggesting the effect of their performing on the

## THE LUCKY PRAYING BUG

THAT HAS AROUSED THE SUPERSTITIONS OF ALL AUSTRIANS BY ALIGHTING ON THE EMPEROR'S HAND.

**W**HILE the Kissing Bug has been making such a sensation in America this Summer, Austria is now being stirred up over an even more curious insect, called the Praying Bug.

This insect alighted, a fortnight ago, on the hand of the Emperor Francis Joseph, when he was walking in the gardens of his Summer residence on Jalben Mountain.

This insect, whose scientific name is *Manis religiosa*, and in German, "Gottesanbeterin" (God's worshipper), is but rarely seen as far north as Upper Austria. The superstitions argue that there must be some Divine reason for its visit, and quote historical reminiscences and alleged facts to bear out their view.

"The mystery explains itself," they say. "God heard our prayers asking Him to command the Emperor to remarry and give the country an heir, and in pursuance thereof, He sent this rare insect devoted to His Majesty's patron, St. Francis, to appeal to our Kaiser."

The credulous Austrians are quite certain that, on August 10, Francis Joseph's sixtieth birthday, his betrothal to some princess or other will be announced, the wedding to follow soon afterward.

Among the royal young women named in connection with the expected espousal is, besides several different Princesses of Bavaria, the Princess Isabel of Orleans.

who comes from a family known for its numerous male offspring.

Here is the story of the Praying Insect's appeal to Francis Joseph as described in an Austrian newspaper:

"Last Thursday, when His Majesty was walking among the beautiful trees of the Jalben Mountain, with his friend, Adjutant-General Count Paar, he suddenly felt a slight pressure upon his right hand, which he had raised to point out to the Count a beautiful old tree near by. Looking to see what it was, the Kaiser uttered a cry of surprise. 'See, Paar, see what I caught,' he said to the Adjutant; 'isn't this a praying bug, as we find them in Tyrol?'"

"It is, and Your Majesty is very lucky, indeed," the Count answered.

"While the Emperor and his friend were talking the strange insect perched on His Majesty's hand as nonchalantly as if it had been its ordinary resting place. And even when Francis Joseph donned his glasses and began to examine it critically it never stirred. The insect was evidently a full-grown specimen. Its long, semi-transparent wings had a greenish sheen, and its fine head, sitting on a semicircular neck, sparkled with many colors, being curiously marked.

"It rested motionless on its hind feet, while holding its half-open fore limbs out-

ward in the attitude of devotion. The hind legs seemed to be extraordinarily long; the forelegs set closely to the front.

"I would never have believed it," said His Majesty, "but the thing really looks as if engaged in prayer."

"Your Majesty knows, of course, the

many superstitions concerning it," said Count Paar.

"I believe my wife, the late Empress, has told me about them."

"Well, according to one the Praying Bug, when asked the right road by a wanderer, points it out to him, and it is

OMEN.

HE MUST MARRY AGAIN AND LEAVE AN HEIR TO AUSTRIA.

claimed that no one was ever deceived by the insect."

"If that be so, Paar, said the Emperor, 'by all means let's ask which way we ought to travel to secure happiness and comfort.'"

Saying so, Francis Joseph touched the insect with a flower and the Praying Bug promptly stretched forth one of its legs in the direction of a path which the late Empress Elizabeth had cleared in the woods for her personal use.

"Francis Joseph affected to regard the insect's motion as the dictate of fate, though he could not be unaware of the fact that, in all probability, he had caused it himself by touching the frail body with his flower. It was a delightful path the two men entered upon."

"It led to a park where was a box marble group representing Venus and Cupid."

"Now we come to the most curious of the narrative," continued the Austrian paper. "The bug which until then had motionlessly on the Emperor's hand, long up his forelegs in mute prayer, and long his bright, shining eyes on him, he away suddenly when His Majesty p to admire the group, and landed squarely on Cupid's bow. There he for a while, his head still turned to the Emperor's face, and with his arms, as is its habit."

Whether Kreis Adjutant then and there saw the relation between the praying insect, the known path and the Venus and Cupid group as the people interpret it, the Austrian paper doesn't profess to know.

The praying bug is quite an unknown insect outside of the southern countries where he lives. That he acquires his reputation for saintliness outside of his own world is quite evident, for he is as voracious as a wolf and as combative as a gamecock. True it is that he holds up his forelegs in the attitude of prayer, but his evident object is not to pray, but to be ready to seize his spoil or defend himself. He feeds on all sorts of insects, including his own kind, but also attacks spiders, lizards and young birds.

Jaw Power of Animals of Prey.

**T**HE power which carnivorous animals have in their jaws is astonishing. Archibald T. Montgomery, an English traveller and scientist, has noticed that the tiger usually seizes an Indian native by the shoulder, and with one jaw on one side and the other jaw on the opposite side bites clean through the chest and back, penetrating the lungs.

In nearly all cases the bite penetrates to the lungs. This kind of a wound is characteristic of the attacks of many of the cat family. Scarcely any bird recovers from a cat's bite for the same reason. The canine teeth are almost instantly driven through the lung, under the wing.

The leopard, when seizing smaller animals, such as dogs, crushes the head; when attacking men it aims at biting through the lungs.

The teeth, even of the largest carnivore are merely the "spearheads," but it is as if for the moment the animal threw its bodily energy into the combination muscular action which we call a "bite." In most cases the mere shock of impact the animal huris itself on its enemy is tirely demoralizing or inflicts physical injury. A muzzled mastiff will hurl a man to the ground in the effort to fasten teeth in his throat or shoulder.

The snapping power of an alligator jaws is more or less intelligible. They long and furnished with a row of pointed teeth from end to end. But the jaws of lion, leopard, tiger, otter, dog, cat, fox or baboon are short, and the long pointed teeth are few. Yet each of these species has a biting power which, in proportion to its size, is almost incredible.

\$10,000 to Prove that Immortality Is Untrue.

**B**Y the singular will of the late Sidney Hall, a Christian Adventist, of Hartford, Conn., \$10,000 is left for the purpose of proving the falsity of the prevailing belief in the immortality of the soul.

Rev. O. H. Prescott, of Auburn, N. Y., has already written the book and the manuscript is in the hands of the Christian Adventist Publication Society, of Boston, which will have charge of the printing and distributing.

The title is to be: IMMORTALITY. The Soul's Immortality Conditional. Conditional Immortality the Scriptural Doctrine.

From this "conditional" title it is evident that the book will not try to utterly destroy the belief in immortality, but to show in what way it is wrong, according to Sidney Hall's belief.

Like most Adventists, Sidney Hall, who has left this strange will, felt strongly on the subject of the immortality of the soul. His reason for calling the doctrine of immortality pernicious was that, to accept it, he had to believe in eternal damnation for the wicked, which he thought to be ridiculous.

Mr. Hall himself wrote a tract upon the subject of immortality, entitled "A Look at the Good Time Coming," in which he said:

"The truth is, the whole theory is a vain chimera—a senseless fiction—a mere human dogma; and to overthrow it nothing more is necessary than to call for the evidence of its truth. No person has ever produced any proof of a distinct entity in man called the soul, or anything regarding its nature or properties, from any source whatever."



The Praying Bug as It Appears with Its Forelegs Uplifted, in the Attitude of Prayer.